WE CLAIM

1. An isolated peptide consisting of an amino acid sequence selected from the group consisting of ALKDVEERX (SEQ ID NO: 1), LKDVEERV (SEQ ID NO: 2), LFGLALIEV (SEQ ID NO: 78) and XLFGLALIEV (SEQ ID NO: 88) wherein X may be any amino acid.

2. An isolated peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 wherein X is Ala, Val, Leu, Ile, Pro, Phe, Met, Trp or Glu.

3. The isolated peptide of claim 1, wherein the peptide consists of the amino acid sequence selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 77 and SEQ ID NO: 78.

4. A composition useful in provoking a cytolytic T cell response comprising the isolated peptide of claim 1, and an adjuvant.

5. An isolated nucleic acid molecule comprising a nucleotide sequence which encodes the peptide of claim 1.

6. The isolated nucleic acid molecule of claim 5 consisting of a nucleotide sequence which encodes the peptide of claim 1.

7. An expression vector comprising an isolated nucleic acid molecule of claim 5.

8. The expression vector of claim 7, wherein said peptide consists of the amino acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 88, SEQ ID NO: 77 and SEQ ID NO: 78.

9. A recombinant cell transformed or transfected with the isolated nucleic acid molecule of claim 5.

10. A recombinant cell transformed or transfected with the expression vector of claim 7.

11. A method for determining if a cell presents an HLA-A2 molecule on its surface comprising contacting a sample containing said cell with the peptide of claim 1 and determining binding therebetween, said binding being indicative of HLA-A2 on the surface of said cell.

12. The composition of claim 4, further comprising at least one additional peptide.

13. A polytope comprising at least two peptides that are linked together wherein at least one of said peptides is a peptide of claim 1.

14. The polytope of claim 13, wherein the peptides consist of an amino acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 88, SEQ ID NO: 77 and SEQ ID NO: 78.

15. The polytope of claim 13, comprising a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1, a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 2, a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 3 and a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 5

16. The polytope of claim 13, comprising a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 77, and a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 78.

17. An isolated nucleic acid sequence encoding the polytope of claim 15.

18. An isolated nucleic acid sequence encoding the polytope of claim 16.

19. An expression vector comprising the isolated nucleic acid molecule of claim 17 in operable linkage with a promoter.

20. An expression vector comprising the isolated nucleic acid molecule of claim 18 in operable linkage with a promoter.

21. The expression vector of claim 19 selected from the group consisting of a plasmid, a cosmid and a virus.

22. The expression vector of claim 20 selected from the group consisting of a plasmid, a cosmid and a virus.

23. A host cell transformed or transfected with the isolated nucleic acid molecule of claim 17.

24. A host cell transformed or transfected with the isolated nucleic acid molecule of claim 18.

25. A host cell transformed or transfected with the expression vector of claim 19.

26. A host cell transformed or transfected with the expression vector of claim 20.

27. A method for determining if a cytolytic T cell (CTL) specific to complexes of an HLA-A2 molecule and a peptide is present in a sample, comprising admixing said sample with an HLA-A2 molecule and the peptide of claim 1 and determining a response by said CTL to complexes of HLA-A2 molecule and said peptide wherein a response by said CTL is indicative of its specificity.

28. An isolated complex useful in isolating a cytolytic T cell, comprising a first and second binding partner which are specific for each other, wherein said second binding partner is bound a plurality of tetramers of an HLA-A2 molecule, a $ß_2$ microglobulin molecule, and the peptide of claim 1.

29. The isolated complex of claim 28, further comprising a label.

30. The isolated complex of claim 28, wherein said first binding partner is avidin and said second binding partner is biotin.

31. A composition comprising the tetramer of claim 28 and a carrier.

32. A method for monitoring status of a tumor, comprising contacting a sample taken from a patient having a tumor with the isolated complex of claim 28, assaying the sample for a level of cytolytic T cell response, and comparing the response level of the cytolytic T cells in the sample to a known level of cytolytic T cell response to monitor the status of said tumor.

33. A method for detecting a cytolytic T cell (CTL) specific for a complex of an HLA-A2 molecule, and an isolated peptide that consists of an amino acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 88, SEQ ID NO: 77 and SEQ ID NO: 78, comprising,

    (a) contacting a cytolytic T cell-containing sample with a composition comprising tetramers of an HLA-A2 molecule, β_2 microglobulin, biotin and a peptide selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 88, SEQ ID NO: 77 and SEQ ID NO: 78,

(b) determining if a CTL in said CTL-containing sample recognizes said tetramers,

wherein recognition of said tetramers is indicative of a CTL specific for a complex of the HLA-A2 molecule and said isolated peptide selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 88, SEQ ID NO: 77 and SEQ ID NO: 78.

34. A method for inducing an immune response in a subject in need thereof comprising administering a composition comprising an effective amount of a peptide consisting of an amino acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 88, SEQ ID NO: 77 and SEQ ID NO: 78, and an adjuvant, wherein said effective amount is sufficient to induce an immune response in said subject.

35. The method of claim 34, wherein said immune response is a stimulation of cytolytic T cells specific for complexes of an HLA and said peptide.

36. The method of claim 34, wherein said subject has cancer and wherein the subject's cancer cells express MAGE-C2.

37. The method of claim 36, wherein said cancer cells expresses HLA-A2.

38. The method of claim 34, wherein said composition comprises a non-tumorigenic cell presenting a complex of the peptide and an HLA-A2 molecule.

39. The method of claim 38, wherein said non-tumorigenic cells are transfected with a nucleic acid molecule that encodes the peptide.

40. The method of claim 38, wherein said non-tumorigenic cells are transfected with a nucleic acid molecule that encodes the peptide and a nucleic acid molecule which encodes the HLA-A2 molecule.

41. The method of claim 38, wherein said non-tumorigenic cells are transfected with a nucleic acid molecule that encodes both the peptide and the HLA-A2 molecule.

42. The method of claim 34, wherein said composition comprises a complex of the peptide and an HLA-A2.

43. A method for treating a subject with a disorder characterized by the presence of complexes of an HLA-A2 molecule, and a peptide having an amino acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 88, SEQ ID NO: 78, presented on surfaces of cells associated with said disorder, comprising administering to said subject an amount of cytolytic T cells, which are specific for complexes of said HLA-A2 molecule and said peptide, wherein said amount is sufficient to alleviate said disorder.

44. A method for inducing a response by cytolytic T cells (CTLs) in a subject having a disorder characterized by the presence of complexes of an HLA-A2 molecule and a peptide having an amino acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 88, SEQ ID NO: 78 presented on surfaces of cells associated with said disorder, wherein said CTLs are specific for said complexes by administering to said subject an agent which induces a response by said CTLs wherein said response is proliferation, release of TNF alpha or lysis of cells presenting said complex.